ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

2200 Churchill Road Springfield, Illinois 62706

Mary Lee Leahy, Director

DIVISION OF LAND POLLUTION CONTROL

APPLICATION FOR PERMIT

TO DEVELOP AND OPERATE

A SOLID WASTE MANAGEMENT SITE

In Accordance With The Environmental Protection Act

All information submitted with and including the Application is available to the public except when specifically designated by the Applicant to be treated confidentially as regarding a trade secret or secret process in accordance with Section 7(a) of the Environmental Protection Act.

APPLICATION MUST BE SUBMITTED IN DUPLICATE

DO NOT WRITE IN THIS SPACE - FOR E.P.A. USE ONLY.

_____ County - Land Pollution Control

_____ / _____

Application Received: _____ Permit Number _____

Reviewed by Geol.( ) Engr.( ) Op.( ) _____ L.P.C. Region _____

Date _____ Plan File Ref: _____

Letter Attached: _____ Permit: Granted _____ Denied _____

Notice To: _____ Date: _____

_____

_____

Type of Solid Wastes Site:
( ) Sanitary Landfill
( ) Incinerator
( ) Composting
( ) Other _____

PART I - APPLICANT INFORMATION

1. SITE IDENTIFICATION

1. Name of Applicant CITY OF URBANA
(Person responsible for operation)

2. Address of Applicant 400 South Vine Street
(Street, P. O. Box, or R. R. #)

Urbana (City) Illinois (State) 61801 (Zip Code)

Telephone: 217 (Area Code) 328-3361 (Number)

3. Name of Land Owner Same
(If same as above, so indicate)

4. Address of Land Owner Same
(Street, P. O. Box, or R. R. #)

Same | Same | Same
City | State | Zip Code

5. Name of Site Urbana Sanitary Landfill

6. Address of Site 1210 East University Avenue
(Street, P. O. Box, or R. R. #)

Urbana | Illinois | 61801
City | State | Zip Code

Champaign County | Urbana Township

7. Land ownership (Check Applicable Boxes)

(X) Presently Owned by Applicant ( ) To Be Leased by Applicant For ____ Years
( ) To Be Purchased by Applicant ( ) ____ Years of Lease Remaining: termination date of lease ____

Operated by: Ill. Corporation ( ) Parternership ( ) Government (X)
Individual ( ) Other ( )

B. SITE BACKGROUND (Check Applicable Box or Boxes)

8. (X) This is an existing operation begun June (mo.) 1954 (yr.).
( ) This is a proposed operation.
(X) This is a proposed extension of an existing adjacent operation:
Illinois E.P.A. Permit No. ____: No Illinois E.P.A. Permit (X).

PART II - LOCATION INFORMATION

A. ZONING AND LOCAL REQUIREMENTS (See supplemental report)

9. Present zoning classification of site Agricultural/Light Industrial.

10. Does present zoning of site allow the proposed usage? (X)Yes ( )No.

11. Restrictions (if any) None

12. Check applicable boxes which describe the use of adjacent properties surrounding site.

	Residential	Commercial	Industrial	Agricultural	Others*
a. North	( )	( )	( )	(X)	( )
b. East	( )	( )	( )	(X)	( )
c. South	( )	( )	(X)	(X)	( )
d. West	( )	( )	( )	( )	(X)

*SPECIFY USE CLASSIFICATION Sewage Treatment Facility

13. a. Are there any permits, operational requirements, licenses, or other requirements or restrictions by any municipality, planning commission, county, county health department, state agency, or other governing body?
( ) Yes (X) No If yes, list below._____

b. Have these requirements, licenses or restrictions been approved by the agency or governing body having jurisdiction? ( )Yes ( )No

c. If the answer to (b) is yes, include photocopies of supporting documents.

B. LOCATION

14. Attach a copy of the United States Geologic Survey (U.S.G.S.) topographic quadrangle map of the area which contains the site. (7.5 minute quadrangle, if published).

Quadrangle Map Provided: Ill. State Geological Survey (Name) August 31, 1973 (Date)

15. a. Outline on the U.S.G.S. topographic quadrangle map the location and extent of the site.
• (In supplemental report) (See Exhibit 1)

b. Provide a legal description of the site. (Typewritten on attached sheet.)
10 acres within
76.02 acres in _____ Quarter, East Half ~~xxxxxxx~~ Northeast Quarter
of Section 9, Township 19 North, Range 9 East.

c. Provide State Plane coordinates of the southwest corner of the site, using the State Plane Coordinate System:

539,780 feet east, 1,257,000 feet north or origin, (X) east zone ( ) west zone

16 General characteristic: (Flood Plain, Hillside, Field, Strip Mine, Quarry, Gully, Gravel Pit, Swamp, etc.)
Briefly describe:_____
Farm Field

17 Plot the following information on the U.S.G.S. quadrangle topographic map, if within the site or adjacent to the outer [illegible] of facility:

a. Wells (domestic, industrial, etc.)
b. Public water sources (wells, stream, [illegible]
c. Residences or residential areas, co[illegible]ies, sewage treatment facilities, industries, insti[illegible]c.
d. Other pertinent facilities not shown on topographic map such as diverted streams strip mines, pon[illegible] etc.

If scale of quadrangle map is not sufficient, show the above items on a separate topographic map (See Part IV - A - 23).

PART III - SITE CHARACTERISTICS

A. GEOLOGY - HYDROLOGY (See supplemental Report)

NOTE: The instructions for this Part of the Application should be read carefully prior to initiating the data-gathering program for the site.

Provide subsurface information in comprehensive detail, sufficient to allow thorough evaluation of the hydrologic and geologic conditions beneath and surrounding the site. This data must fully describe the hydrogeologic interrelationships of the landfill facility, local ground waters, and surface waters. All information requested in sections 18 through 22 should be integrated and presented as a detailed hydrogeologic report.

B. GEOLOGY

GENERAL GEOLOGIC SETTING

18. Provide a brief description of the general geography of the region in which the site is located, and a summary of the hydrogeologic conditions typical of that portion of Illinois.

TYPE AND EXTENT OF SUBSURFACE MATERIALS

19. Provide a complete log (description) of each boring made during the exploratory program, and include all other pertinent data so obtained.

20. Include the following information regarding the bedrock, if encountered during the boring program:

a. Depth(s) to bedrock.
b. Lithology (physical character) and hydrologic characteristics of the bedrock formation.
c. Name and age of the formations encountered during the boring operation and (or) which crop out on or adjacent to the site.

C. MATERIALS CLASSIFICATION AND ANALYSIS

21. Provide the following information for samples taken during the boring operation:

a. textural classification (U.S.D.A. system)
b. particle size distribution curves for representative samples
c. coefficient of permeability - based on field and (or) laboratory determinations
d. ion exchange capacity and ability to adsorb and "fix" heavy metal ions

D. HYDROLOGY

22. Provide the following information regarding the hydrologic flow system in the area of the site:

a. Depth to water in boreholes at time of boring completion and periodic measurements until the water level has stabilized.

b. Rate(s) and direction(s) of ground-water movement.
c. A narrative description (with diagrams) of the design and installation procedures for all piezometers installed at the site. This shall include both water-level measuring piezometers and those installed for permanent use as water-quality monitoring points.
d. An analysis of the background ground-water quality, as per those constituents listed in the Instructions. Attach a copy of the laboratory report.
e. An outline of the procedures, devices, and personnel to be employed for the collection of periodic ground-water samples from the monitoring point(s) installed at the site.

PART IV - CONSTRUCTION PLANS AND SPECIFICATIONS

A. SITE DEVELOPMENT PLAN (See supplemental report)

23. Provide a detailed topographic map of the existing site (Scale 1" = 200' or larger) showing 5-foot contour intervals on sites (or portions thereof) where the relief exceeds 20 feet, and 2-foot contour intervals on sites (or portions thereof) having less than 20 feet of relief. This map should show all buildings, ponds, streams, wooded areas, bedrock outcrops, underground and overhead utilities, roads, fences, culverts, drainage ditches, drain tiles, easements, streets, any other item of significance, including legal boundaries.

    Show the location and elevation of borings as described in Part III - 19, 20.

24. Provide a separate map, at the same scale as that above, of the developed site showing the following:

    a. All changes in topography dictated by design and operational factors.
    b. All surface features (as specified in IV - A - 23) both unaltered and modified, and installed as part of the facility. This shall include all new construction with location plans for berms, dikes, dams, earth barriers, surface drainage ditches, drainage devices (culverts, tiles), fencing, access roads, entrance(s), utilities, buildings, sanitary facilities, monitoring well(s), streams, ponds, mines, and any other special construction as may be required to comply with the provisions of the Rules and Regulations.

25. Provide a topographic map of the closed and covered site showing final contours, with an interval of 5 feet if relief is greater than 20 feet, and intervals of 2 feet if relief is less than 20 feet.

26. Provide cross sections or profiles (Scale 1" = 200' or larger) of the developed site to clearly indicate: (Minimum of three cross sections recommended)

    a. Proposed fill areas
    b. Sequence of placement and total compacted thickness of each lift
    c. Thickness of cover material for each lift
    d. Slope and width of working face for each lift
    e. Slope of completed fill with final cover in place
    f. Subsurface strata to a minimum depth of thirty feet below the base of the fill material
    g. Earth barriers, berms, dikes and other barriers, including essential dimensions of each

27. Provide plan views (Scale 1" = 200') and cross sections of the leachate collection and treatment system, if utilized, including the following information:

a. Type, location and construction of subsurface collection system, and all attendant devices.
b. Location, dimensions, volume, and surface elevation of treatment lagoon(s), if used.
c. Detailed written narrative of the method and processes of the treatment system, and program for monitoring the performance and effectiveness of the treatment system.
d. Discharge point(s) of effluent.

B. SCHEDULE OF CONSTRUCTION

28. Attach a typewritten narrative supplemented by indications on the plans of the sequence of areas to be filled. Estimate the date of beginning and ending of each phase of construction and operation.

C. CONSTRUCTION REQUIREMENTS

29. Attach a typewritten narrative supplemented by indications on the plans of provisions to be made for:

a. Prevention of surface-water pollution.

b. Control of gas migration.

c. Elimination of flood hazard, if any.

d. Employee facilities.

e. Access to the site.

f. Measuring quantity of solid waste delivered to the site.

PART V - OPERATING PLAN

A. SOURCE AND VOLUME (See supplemental report)

30. Indicate the estimated quantity of each of the following sources and types of solid waste the facility will handle during each day of operation; each week of operation; each year of operation. Specify any additional information regarding refuse source and quantity.

SOURCE	TYPE	DAILY QUAN.	WEEKLY QUAN.	ANNUAL QUAN.
a. Residential				
b. Commercial				
c. Industrial				
d. Agricultural	(See supplemental Report)			
e. Other (Describe)				

31. At the above projected rate of use, what is the expected useful life of the facility? 53 years

32. Will water treatment or wastewater treatment sludge be accepted at the facility? ( )Yes ( )No. If the answer is yes, all pertinent information requested in Part VI of the Application form must be provided. N/A

33. If "hazardous wastes" (other than waste water sludges) will be accepted at the facility, list these wastes, give quantity to be accepted, provide a complete analysis of each, and attach a detailed description of the special procedures to be used for their disposal at the facility. None

B. DESCRIPTION OF OPERATING PROCEDURES

34. Attach a typewritten plan of operation to accompany this application. This plan should include the following subjects:

a. Method of landfill (trenching, area fill)
b. Time schedule for filling and daily covering

C. OPERATING REQUIREMENTS

35. Attach a typewritten description of provisions for:

a. Personnel for supervision and operation
b. Traffic control
c. Designation of unloading area
d. Cell size and construction
e. Provisions for blowing litter control
f. Rodent control
g. Fly control
h. Bird control
i. Dust control
j. Odor control
k. Management of surface water
l. Erosion control
m. Final cover and final slopes
n. Monitoring program for gas
o. Reuse and recycling operations
p. Monitoring program for ground water (See Part III - D - 22)

36. Provide a list of equipment to be used for the landfill operation:

ITEM(S)	MODEL NUMBER	NO. OF UNITS IN OPERATION	DESCRIPTION
1	D7	1	Caterpillar-Crawler Bulldozer
2	12G	1	Allis Chalmers- Crawler Loader
3	977L	1	Caterpillar-Crawler Loader
4	4"	2	Homelite-Trash Pumps
5	599C	1	American-Dragline (T)
6	?	1	Earth Scraper (T)

PART VI - ON - SITE SLUDGE DISPOSAL

The information requested in this Part of the Application form must be provided only if water treatment or wastewater treatment sludge is proposed to be accepted for disposal at the site. N/A

37. Indicate the type of sludge to be accepted at the facility for ultimate disposal:

( ) Water treatment
( ) Wastewater treatment

( ) municipal	( ) filter cake	( ) raw
( ) industrial	( ) sludge cake	( ) digested
( ) combined	( ) heat-dried	

38. Provide a brief narrative of the wastewater or water treatment processes and operations utilized at the treatment facility generating the sludge in question.

39. Provide a brief narrative of the sludge de-watering and (or) sludge drying operations utilized at the treatment plant. What is the expected solids content (by weight) of the processed sludge? _____

40. If industrial or combined wastewater sludges are proposed to be deposited at the site, provide a comprehensive chemical analysis of same. Attach a copy of the laboratory report as part of the Application. Provide a brief description of the manufacturing process(es) which results in the generation of the industrial wastewater including chemical reagents used during such processing.

41. Provide a reasonable estimate of the projected quantity of processed sludge to be deposited at the site on a unit time basis. Specify any additional information regarding sludge generation.

SOURCE	WEEKLY QUANTITY	MONTHLY QUANTITY	ANNUAL QUANTITY	OTHER INTERVAL
A. Municipal				INTERVAL
B. Industrial				
C. Combined				

42. Provide a brief statement describing the method of sludge conveyance to the refuse disposal site from the treatment facility. Include an attached typewritten list of equipment and personnel to be used for sludge handling and transport.

43. Outline in a concise statement the operational procedures to be used on-site to properly dispose of the sludge at the operational protion of the facility. Describe the provisions to be-made for odor control if nuisance conditions arise from the disposal of partially digested sludges.

44. Attach a typewritten description supplemented by indications on the plans of provisions for final grading and, if applicable, revegetation of the completed landfill areas. State what arrangements will be made for the repair of eroded, cracked and uneven areas, and any other maintenance of the site until its pollution potential is adjudged exhausted.

45. By signature affixed to this Application for Permit the Applicant affirms his intent to record description and plan of the completed site with the county official responsible for maintaining titles and records of the land, in accordance with the Rules and Regulations of this Agency, if granted a Development and/or Operating Permit.

I hereby affirm that all information contained in this Application is true and accurate to the best of my knowledge and belief.

Signature of Applicant: Thomas Daley, Mayor — Date: Aug. 13, 1974

Attest: [signature] — Date: 8-13-74

Signature of Engineer: James R. Glover — Date: Aug 13, 1974

Illinois Reg. No.: 22761

Attest: [signature] — Date: 8-13-74

(Seal)

Signature of other person, technical and non-technical, who has supplied data contained in the submittal.

James S. Daley Jr. — Signature — Date: Aug 13, 1974

ICEC # 042918 - ENGINEERING TECHNICIAN
Reg. No., Position, Title, Etc.

(Seal)

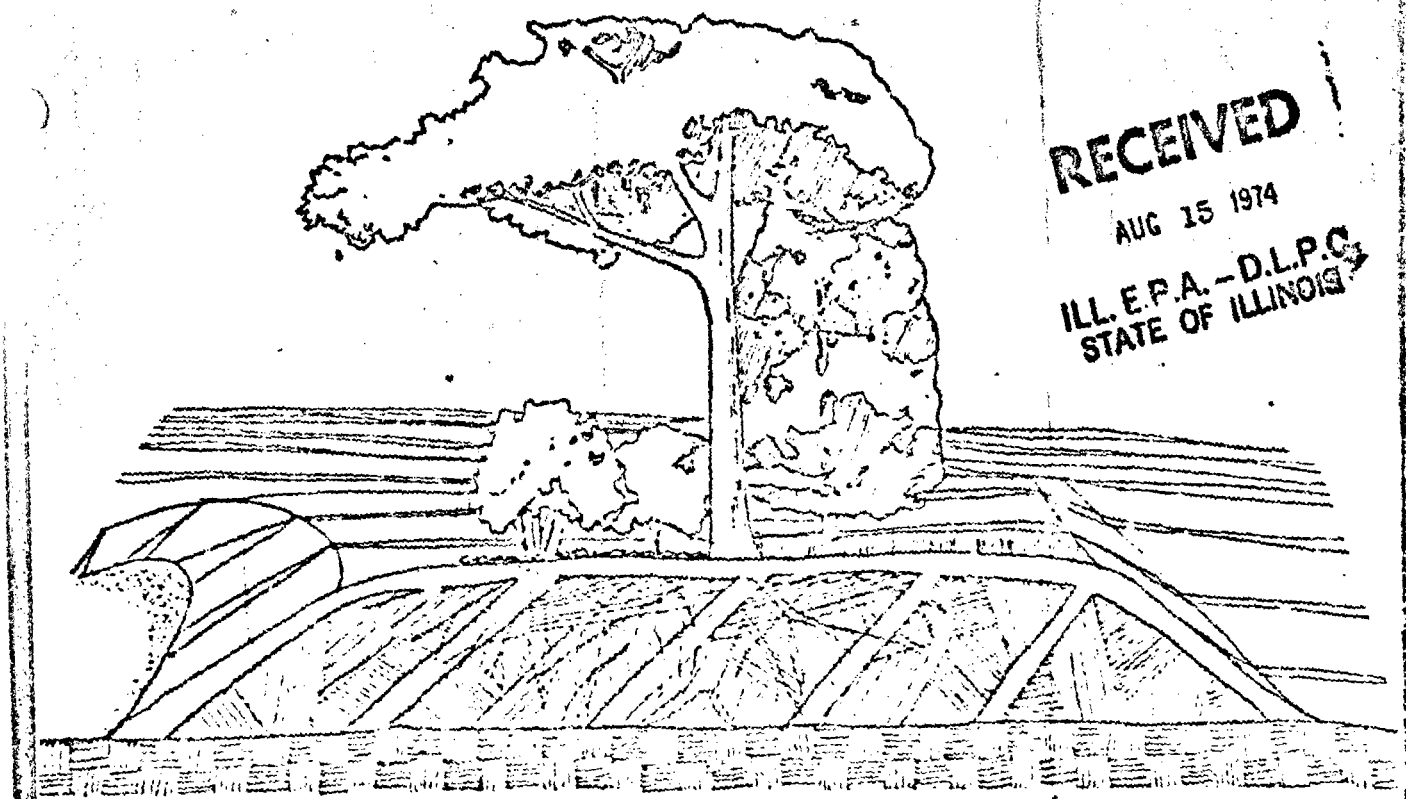
Signature — Date

Reg. No., Position, Title, etc.

(Seal)

CITY OF URBANA

SANITARY LANDFILL PERMIT APPLICATION



CITY OF URBANA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

SUPPLEMENTAL REPORT

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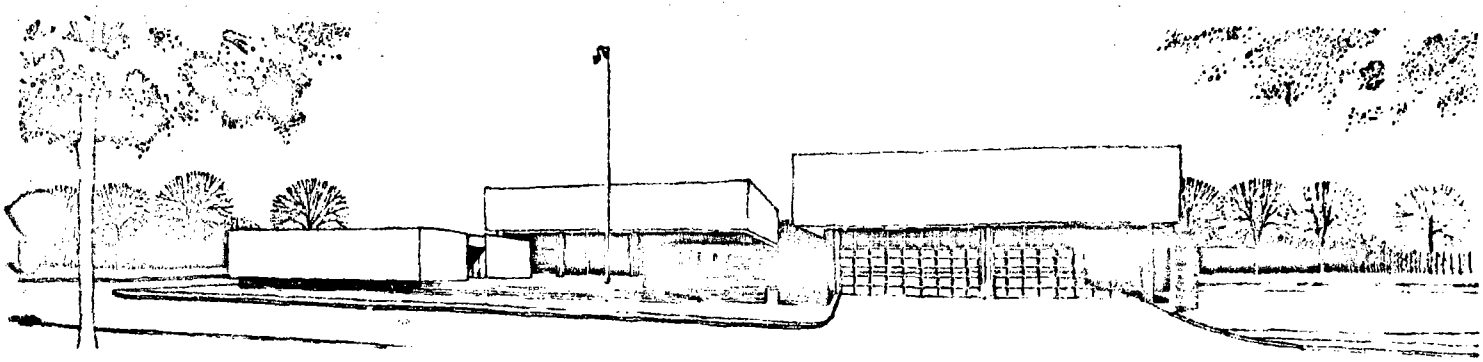


CITY OF URBANA · 400 SOUTH VINE STREET · URBANA ILLINOIS

OFFICE OF: CODE ENFORCEMENT DEPARTMENT

July 12, 1974

City of Urbana
c/o Jim Darling
Engineering Department
P. O. Box 219
Urbana, Illinois

Dear Mr. Darling:

In response to your inquiry into the zoning status of Urbana's landfill, when the land fill is annexed to the city on July 15, 1974: Under county zoning, Urbana landfill is located on land zoned agricultural and therefore under Section 34.8 entitled "Land Which Subsequently Falls Within the Jurisdiction of the City" of Urbana's Zoning Ordinance, the landfill is rezoned agricultural (Urbana). Under Urbana's zoning ordinance the landfill operation existed prior to zoning ordinance and is by law considered a legal use, although non-conforming in the respect landfills are only allowed in an agricultural zoning district as a special use permit.

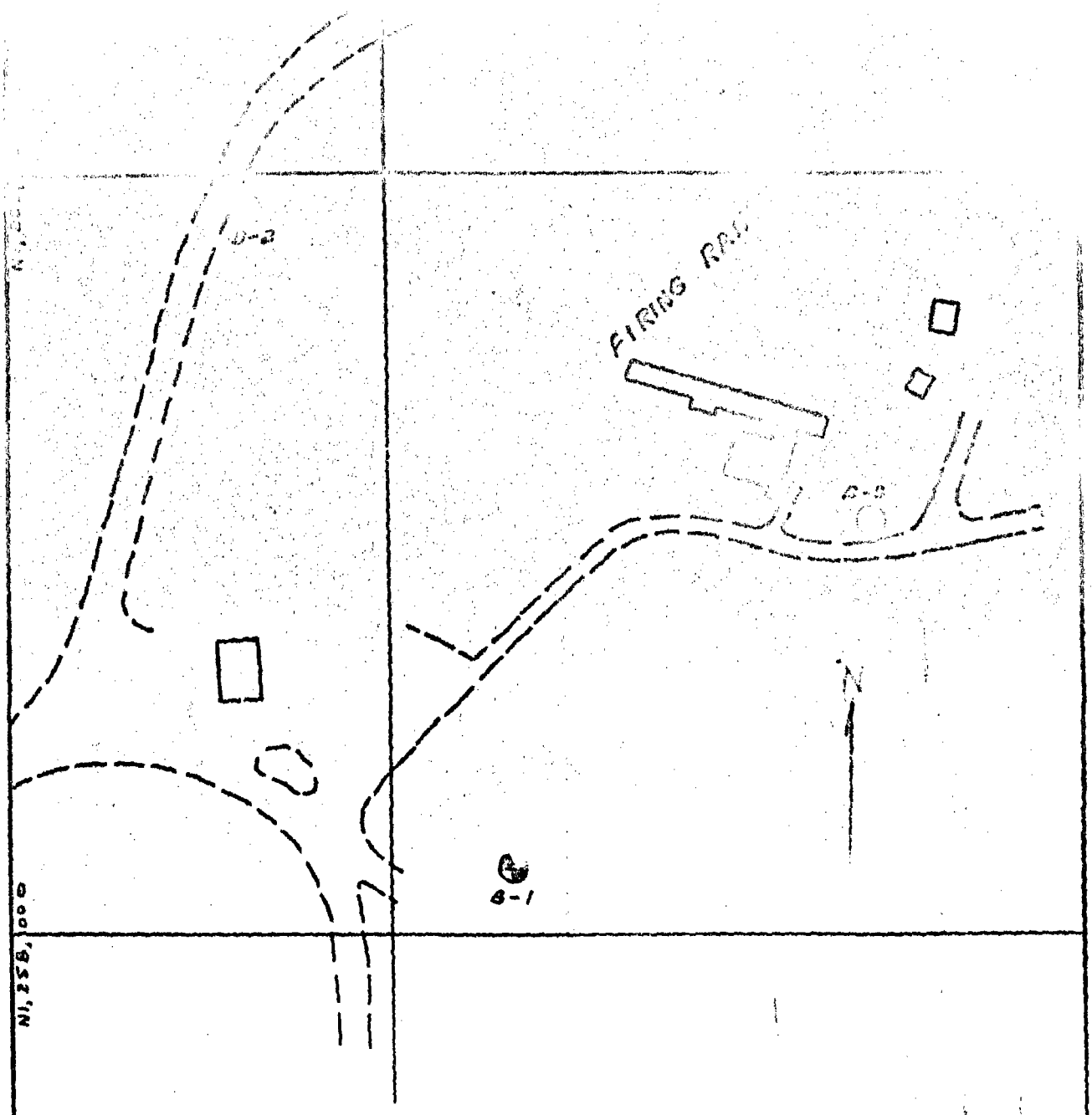
There is no requirement for an existing landfill to apply for a special use permit, however, if one was desired, an application for a special use permit would have to be filed with the Urbana Plan Commission, who would hold public hearings and then recommend to the Urbana City Council granting or denial of the special use permit.

Sincerely,

Larry E. Reed

Larry E. Reed, Administrator
Code Enforcement Department

/cr



NOTE: Boring 4, not shown on diagram, was drilled southwest of B-1 near center of proposed lake area.

BORING LOCATION DIAGRAM	Scale 1" = 100'	
PROJECT NAME City of Urbana Landfill Urbana, Illinois	PROJECT NO. 7457	DATE July 12, 1974

PART IV - CONSTRUCTION PLANS AND SPECIFICATIONS

A. Site Development Plan

23. Attached - Exhibit 2

24. The following is a description of construction plans to be completed during the course of this landfill operation. See the attached site plan, Exhibit 3 , which is numerically referenced to the following:

(1) This is an existing open drainage ditch serving the proposed landfill area. To the east of the ditch there is a 20 ft. lift of refuse which was placed there during previous fill operations. There is a considerable amount of exposed refuse on this rather steep slope. In order to remedy this situation and to prevent surface water contamination, the City will install approximately 400 lin. ft. of 36" concrete pipe in this ditch. This section of storm sewer will start in a proposed manhole at the pipe culvert (A) under the north access road and will flow to the saline ditch on the same grade as the existing ditch. The ditch will be backfilled and compacted. This will allow for the proper covering and sloping of the adjacent fill area. (Note: See Part V - Wet weather site) This sewer project will be performed by City personnel under the supervision of the Engineering Division. Construction is scheduled for late September, 1974.

(2) This is a drainage ditch which is to be excavated from the southeast corner of the larger landfill area to pipe culvert (A). It will be constructed in two phases. Phase I will extend from the southeast property corner west 740 ft. to a proposed pipe culvert (D) which will flow north under the south access road into an existing open ditch. This existing ditch then flows north to an existing swail which will carry the runoff to pipe culvert (A). This phase of the ditch excavation will be completed by the submittal date of this application. Phase II of this ditch will only be necessary if Trench #3 is needed and excavated. Under this phase, the pipe culvert constructed in Phase I will be removed and salvaged. The ditch will then be extended along the south side of the south access road to proposed pipe culvert (B). At this point, pipe culvert (B) will be constructed from the salvaged material discussed above. This culvert will flow north under the south access road to a proposed ditch. This ditch will follow the east edge of the south and north access road to pipe culvert (A). The layout for this work will be performed by the City Engineering Division and the excavation will be done by the City Sewer Section.

(2a) This open ditch is to be abandoned by backfilling and compacting. This is to be performed simultaneously with the excavation of the ditch in Phase I above.

(3) This is the demolition and removal of an abandoned trap shooting range. To be demolished and removed by City personnel before the excavation of Trench #5 or the closing of the landfill.

(4) This is the demolition and removal of the active Police Firing Range. This will occur only if the secondary fill area is needed or before the proposed disposition of the landfill to the Urbana Park District.

(5) This is the dredging of an existing drainage ditch to provide drainage for the proposed borrow pit excavation both during and after its excavation. In addition it is to provide drainage to eliminate the ponded area as indicated on the site plan. To be performed by City personnel before the borrow pit excavation starts.

(6) This is the construction of an additional machine shed to house recently purchased equipment through the winter. Construction is to be completed by November 1, 1974 by a private contractor.

(7) This is the periodic resurfacing of the access roads by the application of an oil and chip treatment.

(8) This is the approximate location of the borrow pit for final cover material. Further discussion can be found in Part IV #28.

(9) This is this installation of two pipe culverts (C & F) to provide ingress and egress to the borrow pit area. This is to be completed before borrow pit excavation begins.

25. Attached - Exhibit 4

26. Attached - Pages 16 through 25. For crossections of fill areas. Cell details are contained within the text of the Operating Plan (Part V).

27. No leachate collection system is proposed.

B. Schedule of Construction

28. Trenches and fill areas are to be excavated in accordance with the sequence described in Part IV #28, and the crossections on pages 16 through 25. Trenches are to be excavated by a 1½ cu. yd. dragline and crawler loaders when necessary. Excavation will start at the south end of the trenches and work to the north end. Approximately one-third of the excavated material would be deposited on the

east bank with the remaining two-thirds on the west bank. At all times there should be a minimum 5' clay berm surrounding the excavated area in order to prevent surface water from entering the trench. Excavation of the trenches sh shall be such that the slope of the floor is always to the north. This is necessary in order to collect runoff water at the north end in an excavated sump pump. The trench is to be kept dry both during excavation and during fill operations by using the 4" trash pumps.

The wet weather site is to be excavated using the same method as for the trenches. (Note: At the time this application is submitted, this excavation will 50% complete.)

Final cover material is to be obtained from a borrow pit excavation shown in the final grading plan. This borrow pit is to be excavated under contract by a private firm. Excavation layout and design is being performed by the City Engineering Division in conjunction with the Urbana Park District. This borrow pit will provide adequate cover material for the entire landfill site. Auger borings have been made at random locations over the larger landfill site to determine the specific needs for final cover. The final cover will be a minimum 2 feet and will approximate the final grading plan. The actual excavation work is being negotiated at the time of this application's submittal and will be initiated as soon as bid letting and contract award procedures are completed.

C. Construction Requirements

29. a) Prevention of surface water pollution is accomplished by the application of a compacted impermeable daily cover. In addition the intermediate and final grading of the slopes will increase the runoff rate and prevent ponding.

b) No plan to control gas migration is proposed.

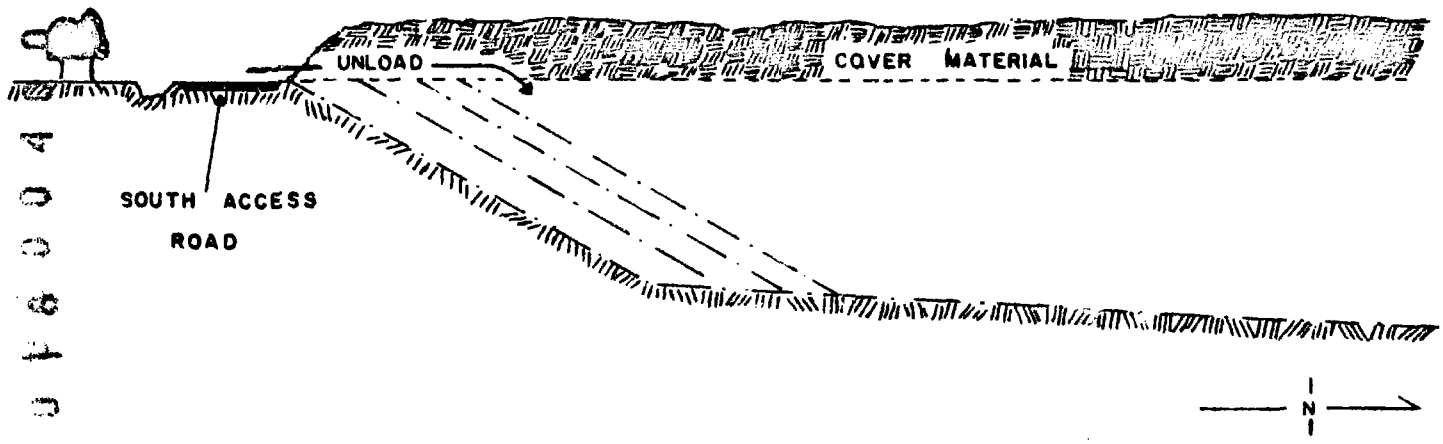
c) No flood hazard exists.

d) There is an existing garage building containing the supervisors office and washroom facilities. This building is heated and water is provided by well. (This well water quality is to be checked bi-annually as outlined in Part V, C, #35) Parking area for employees is provided on the west side of the existing garage.

e) Access to the site is on an all weather (bituminous) road off of University Ave. Access is restricted by complete fencing surrounding the landfill and by a gateman.

f) Solid waste quantities are estimated by volume of area consumed. To be performed by the City Engineering Division.

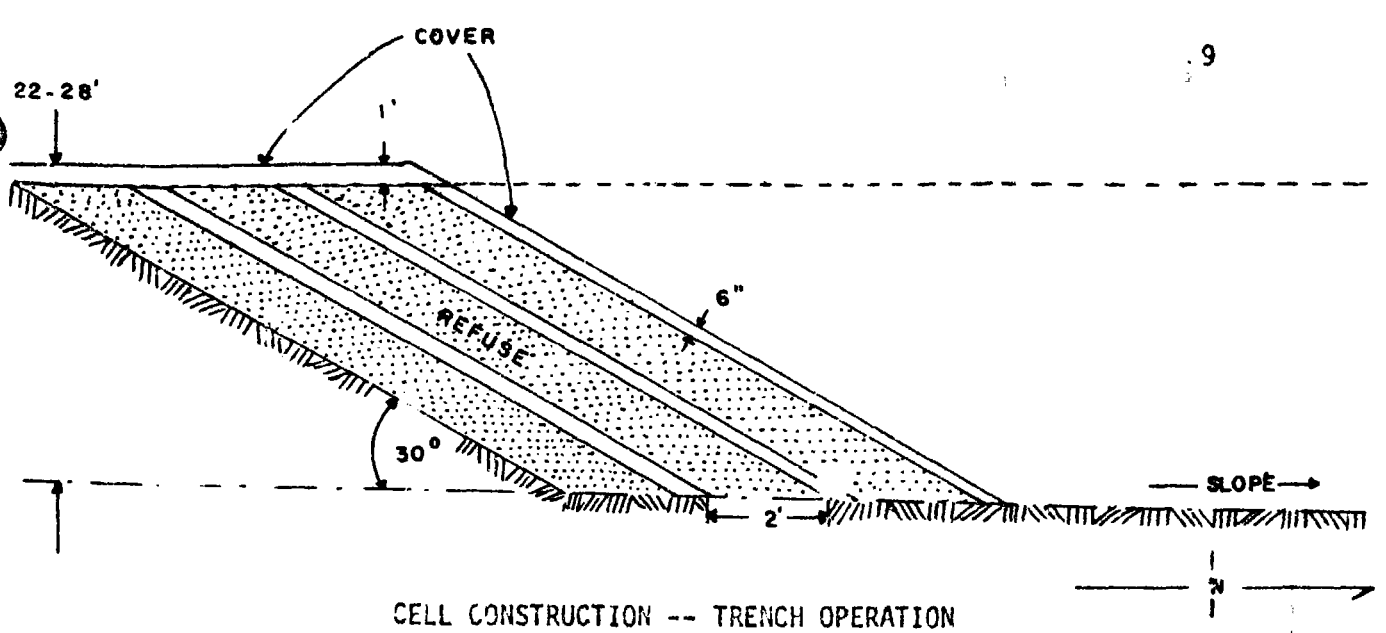
The operation shall proceed to the north end of the trench at which time the north access road may be used.



TRENCH FILL OPERATION

Refuse will be compacted into cells 1 to 2 ft. in thickness which will then be covered daily with a minimum of 6" of compacted cover material. This cover material will be obtained from stockpiles on the sides of the excavated trenches. This cover material is comprised of yellow and blue clays, which after compaction offer an impermeable dense cover which will aid in the control of vectors, fire, litter, and surface water penetration. In addition, the first lift to the original ground elevation will be covered with a compacted intermediate cover of 1 ft. thickness. This cover will be well-compacted and well-drained of surface waters as it will serve as an access road for refuse haulers.

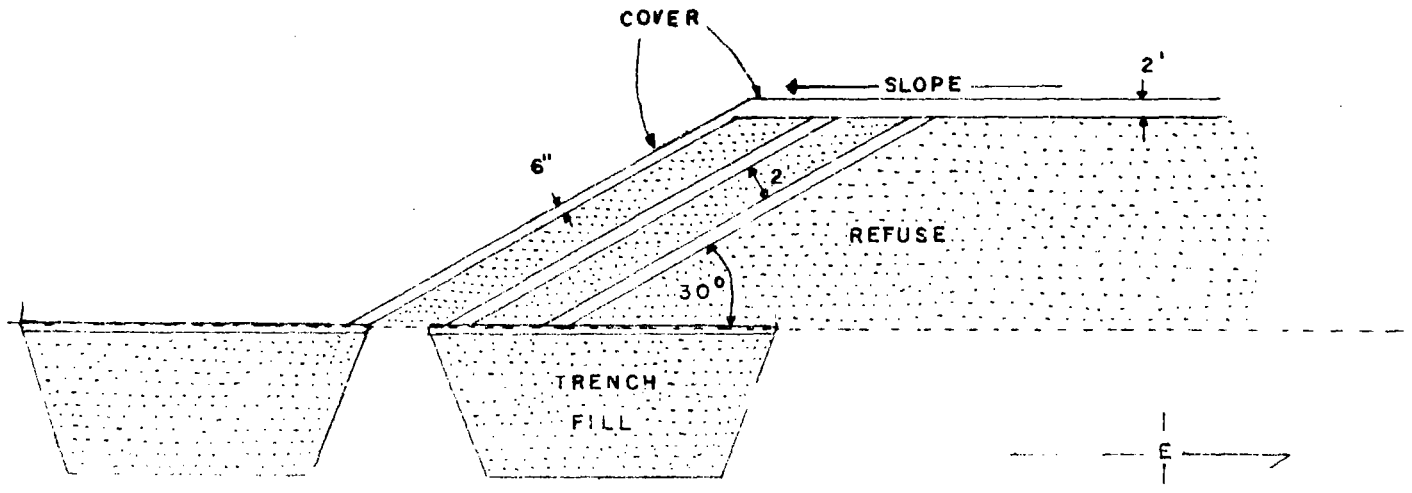
In order to obtain maximum volume efficiency, compaction of the refuse will be continuous throughout the operating day and compacted density of the refuse will approach 1,000 lb./cu. yd. The working face will be maintained at approximately 30 degrees from the horizontal.



CELL CONSTRUCTION -- TRENCH OPERATION

The fill operation will continue in Trench #1 until it is completely filled to the original ground elevation. After this first lift is complete, the fill operation will shift to the south end of Trench #2 and will continue to the north end of Trench #2. At this point, both Trenches #1 and #2 will be completely filled to the original ground elevation. The operation will then shift to an area fill method above the original ground elevation at the south end of Trench #1.

CELL CONSTRUCTION -- AREA FILL



Refuse trucks will unload at the toe of the slope and the refuse will be spread and compacted uphill. Cover material will be obtained from material stockpiled from the excavation of Trenches #1 and #2. After the area fill has completed the entire length of Trench #1, the fill operation will shift to the south end of Trench #3. This sequence of fill operations shall continue according to the following schedule:

Fill & Excavation Schedule

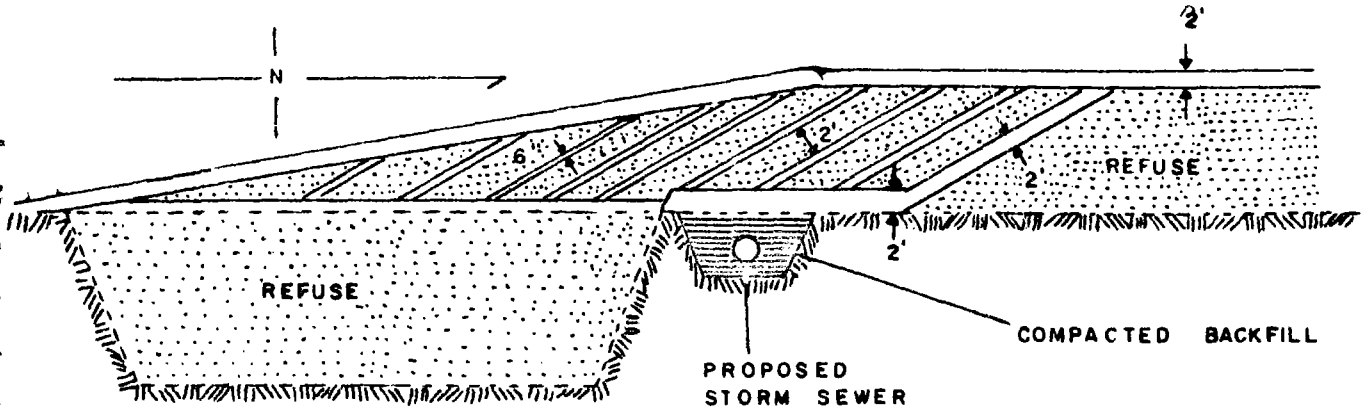
Fill Sequence	Excavating Sequence
	Trench #1
Trench #1 to Ground Elevation	Trench #2
Trench #2 to Ground Elevation	
Area #1A to Proposed Elevation	Trench #3*
Trench #3 to Ground Elevation	
Area #2A to Proposed Elevation	Trench #4
Trench #4 to Ground Elevation	
Area #3A to Proposed Elevation	Trench #5**
Trench #5 to Ground Elevation	
Area #4A to Proposed Elevation	Trench #6
Trench #6 to Ground Elevation	
Area #5A to Proposed Elevation	Trench #7
Trench #7 to Ground Elevation	
Area #6A to Proposed Elevation	
Area #7A to Proposed Elevation	

* See drainage ditch details - Part IV-24 #2
** See demolition details - Part IV-24 #3

The proposed elevation and final slope of the area fill operation is a function of the opening of the new County Landfill. As soon as a definite opening date is established, Urbana will be able to gear its fill operation to conform to the final optimum slope, as shown on the final grading plan. Crossection details have been provided for each trench on pages 19 to 25. These crossections make final elevation provisions for continuing the operation past that particular trench as well as provisions for terminating the operation with that particular trench or area. As we do not have a definite opening date for the new landfill, we have provided elevation alternatives which offer final slopes and elevations for closing at any point during the operation. These final slopes and elevations are suitable to the future proposed use of this landfill site.

In addition to the primary fill area, a wet weather site will be excavated and used during severe weather. The location of this site is shown on the site plan on page 15. The wet weather site will be excavated and filled in simultaneously with the filling of the primary fill area. Refuse trucks will unload from the south end of the site and refuse will be compacted into cells [illegible]

cell construction for the trench method. An all-weather access road will be maintained from the main entrance road to both the north and south end of this area. The wet weather site will be filled to ground level only. However, in the event that all other sites are used, including the secondary fill area, the wet weather site will be filled above ground level to an elevation matched to the existing fill. If this is necessary, a two-foot well-compacted cover of clay will be laid over the proposed storm sewer as per the following illustration: (Note: See part IV A, 24 #1)



WET WEATHER SITE

In the unforeseen event that the primary fill area and the wet weather site is consumed, the secondary fill area will be excavated and filled in the same method as the wet weather site. Access to this site will be from the north access road. It is highly unlikely that this site will ever be used as a fill area. This area now houses the Urbana Police Department Firing Range, which will remain on the site until the fill area is needed or the landfill operation is terminated altogether. (Future proposed plans for this site include construction of an outdoor amphitheatre by the Park District.)

Equipment used for the fill operation will consist of the Caterpillar #D7 for spreading and compacting. For the excavation and cover operation, the Allis-Chalmers #12G and the Caterpillar 977L will be used. The latter two machines may be used for spreading and compacting in order to accommodate sporadic increases in refuse delivery.

Refuse unloading will normally be directed by the equipment operators and by the landfill supervisor when adverse situations arise (such as bringing slopes back into proper conformance to the operating plan, or to control surface drainage).

b) Time Schedule for Filling and Daily Covering.

Monday through Friday Schedule:

6:30 A.M. - Check out tractors and drive from garage to the fill site.

7:00 A.M. - Landfill gate is opened.
- Bulldozer begins filling and compacting.
- End loader brings dirt out of trench to be used for daily cover.

3:40 P.M. - Gate closes

4:00 P.M. - Filling is completed and covering begins.

5:00 - 5:30 P.M. - Covering is completed.
- Tractors are cleaned and returned to garage.

5:30 - 6:00 P.M. - Daily Operation is completed.

Saturday Schedule:

6:30 A.M. - Check out tractors and drive from garage to the fill site.

7:00 A.M. - Landfill gate is opened.
- Bulldozer begins filling and compacting.
- End loader brings dirt out of trench to be used for daily ocver.

11:40 A.M. - Gate closes.

12:00 A.M. - Filling is completed and covering begins.

1:00 - 1:30 P.M. - Covering is completed.
- Tractors are cleaned and returned to garage.

1:30 - 2:00 P.M. - Daily operation is completed.

C. Operating Requirements

35. a) Personnel for Supervision and Operation

1 Supervisor: Responsible for daily operation of landfill including correct disposal and covering of refuse, maintaining records, supervising personnel, equipment maintenance, and final grading.

1 Gate Attendant: Checks vehicles entering for proper city

permits, opens and closes gates, collects dumping fees for non-permit holders, screens loads for undesirable materials.

4 Operators: Operate city-owned and leased equipment, handle and cover refuse, apply and grade final cover, any other related earthwork, ie drainage ditches.

2 Summer Help: Fulltime during summer to assist supervisor, mow weeds, pick up paper, etc.

b) Traffic Control

Existing portable signs and arrows are used to route traffic to the proper fill area. During inclement weather traffic will be routed to the wet weather trench.

c) Designation of Unloading Area

Signs are used and operators direct haulers to the proper unloading position.

d) Cell Construction

See Part V #34a.

e) Blowing Litter

Two movable fences are used to control blowing litter. They are approximately 30 ft. long, 8-10 ft. high, with a 2x4" mesh. They will be moved in relation to prevailing winds. The trenches are designed to be perpendicular to prevailing winds which will decrease the amount of blowing litter.

f,g,h) Rodent, Bird and Fly Control

To be controlled through the proper application of daily, intermediate, and final cover.

i) Dust Control

Water is sprayed from a City flush truck when conditions demand it.

j) Odor Control

Odor is controlled through adequate daily cover.

k) Surface Water

Berms are constructed where necessary to keep surface water away from exposed refuse during the daily operation. Final shaping and grading will be done so as to increase the runoff rate. Ditches will be constructed to aid in the

swift removal of surface water. (See Part V) Water which collects in the trenches will be pumped out from a constructed sump pit.

l) Erosion Control

Erosion will be prevented by maintaining gentle final slopes. In addition, the Urbana Park District will initiate replanting and soil conditioning in their efforts to develop a park area.

m) Final Cover & Final Slopes

Final cover will be applied according to the final grading plan. The actual excavation is to be performed by a private contractor. Cover material will be obtained from the borrow pit as shown on the final grading plan.

n) Monitoring Program for Gas

We propose no program.

o) Reuse and Recycling Operation

None

p) Monitoring Program for Groundwater

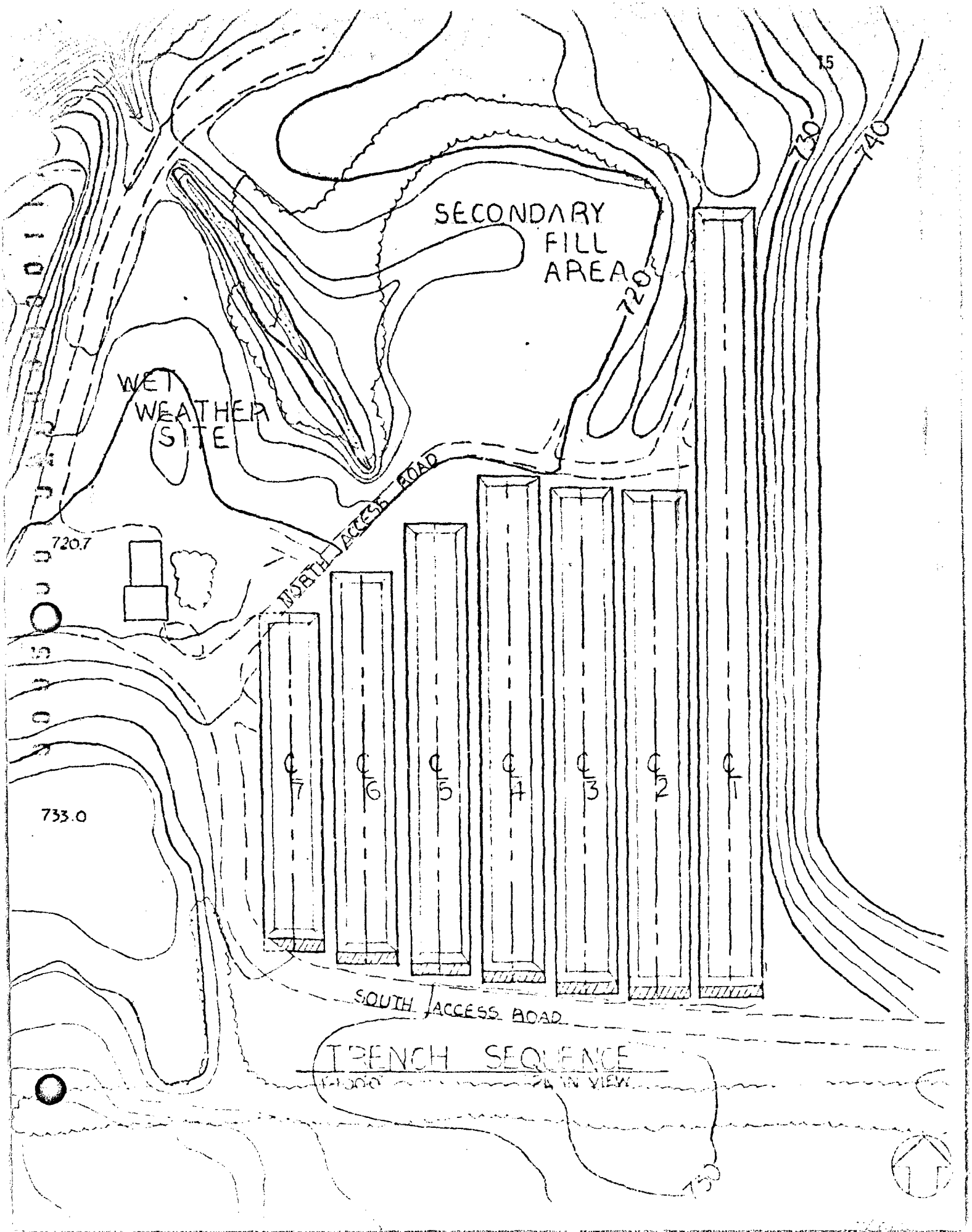
We have installed a piezometer as noted on the site plan (boring #2). Samples will be colledted quarterly and the following tests shall be made:

1. Total dissolved solids
2. Chloride content

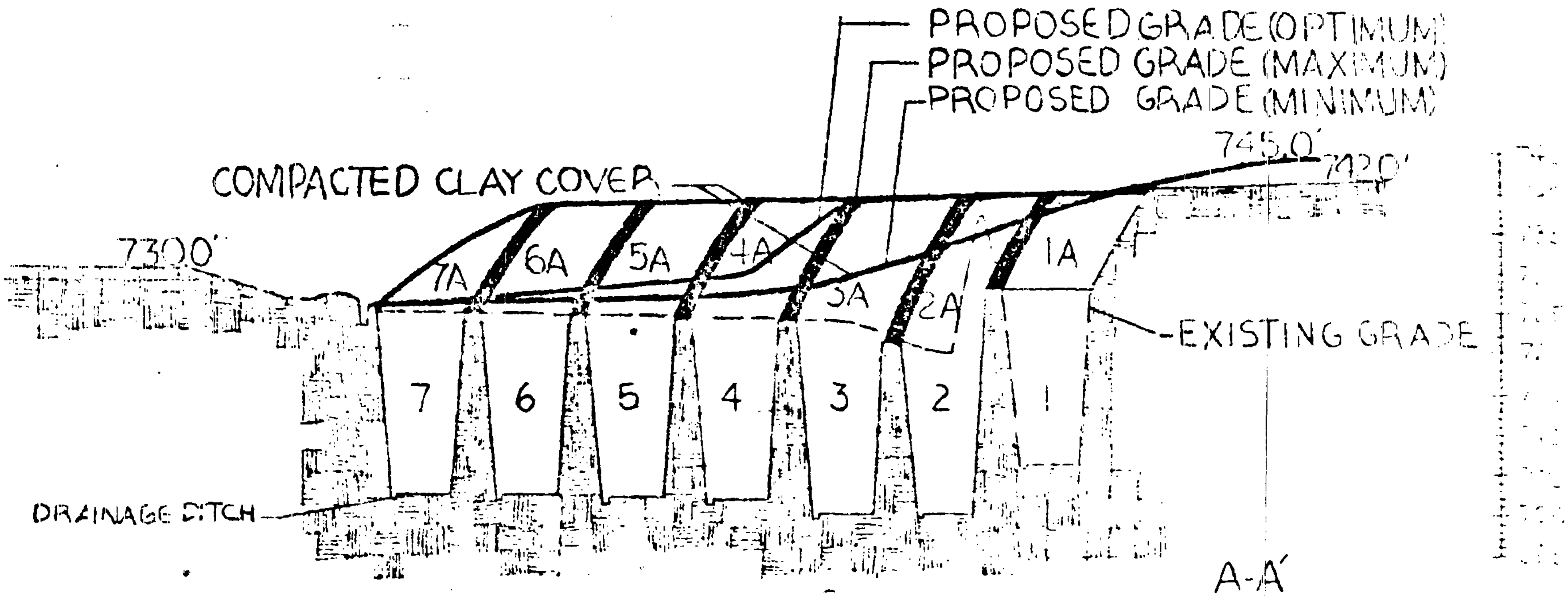
In addition, the well water shall be tested for quality bi-annually. These results shall be submitted to the Division of Land Pollution Control, E.P.A.

Sampling Dates

	Groundwater Tests-EPA	Well Water Quality
November 1974	X	X
February 1975	X	
March 1975	X	X
August 1975	X	
November 1975	X	X
February 1976	X	
March 1976	X	X
August 1976	X	
November 1976	X	X
February 1977	X	
March 1977	X	X
August 1977	X	



TRENCH SEQUENCE
(1"=200') PLAN VIEW

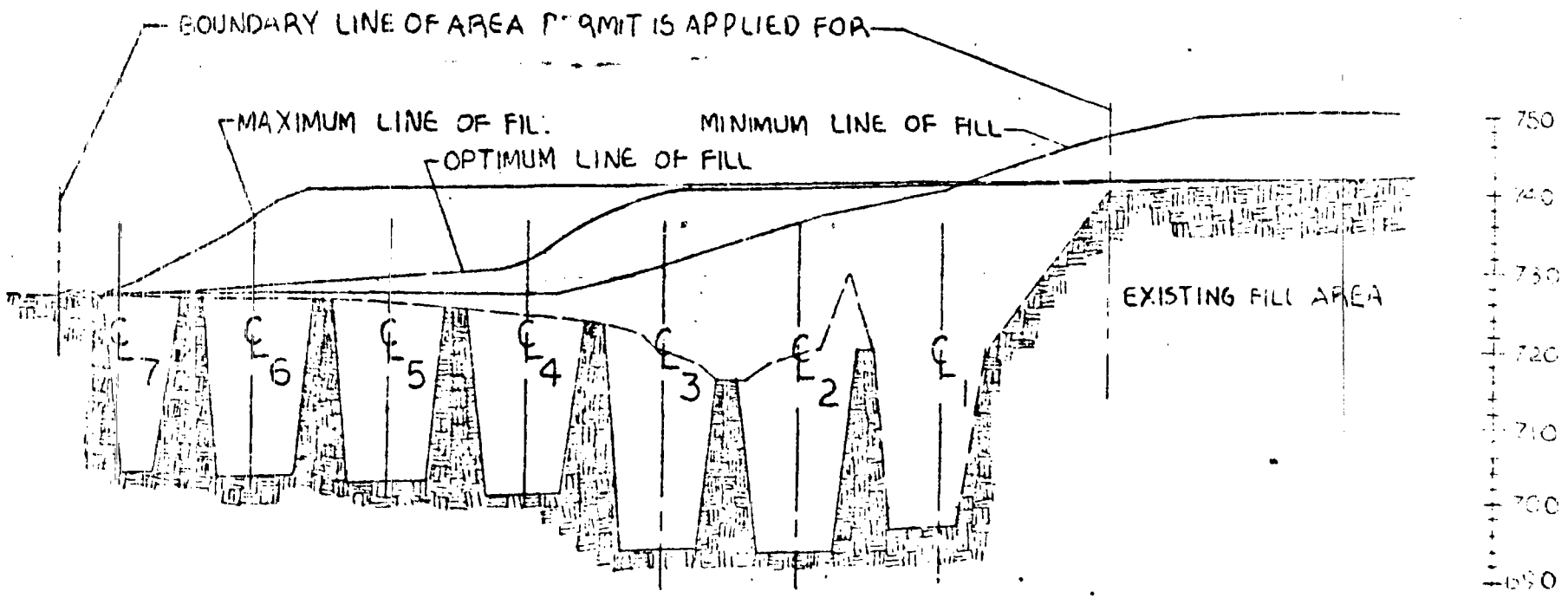


TRENCH SEQUENCE

1"=20'-0" VERTICAL
1"=100'-0" HORIZONTAL

CROSS SECTION

17



SECTION B-B'

1"=20'-0" VERTICAL
1"=100'-0" HORIZONTAL
CROSS SECTION

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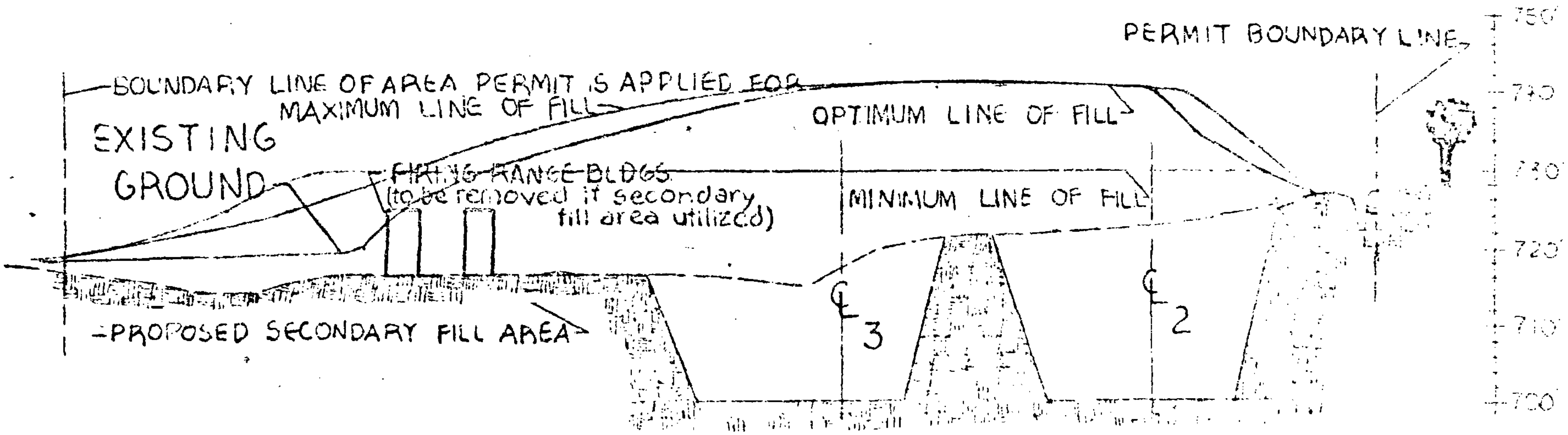
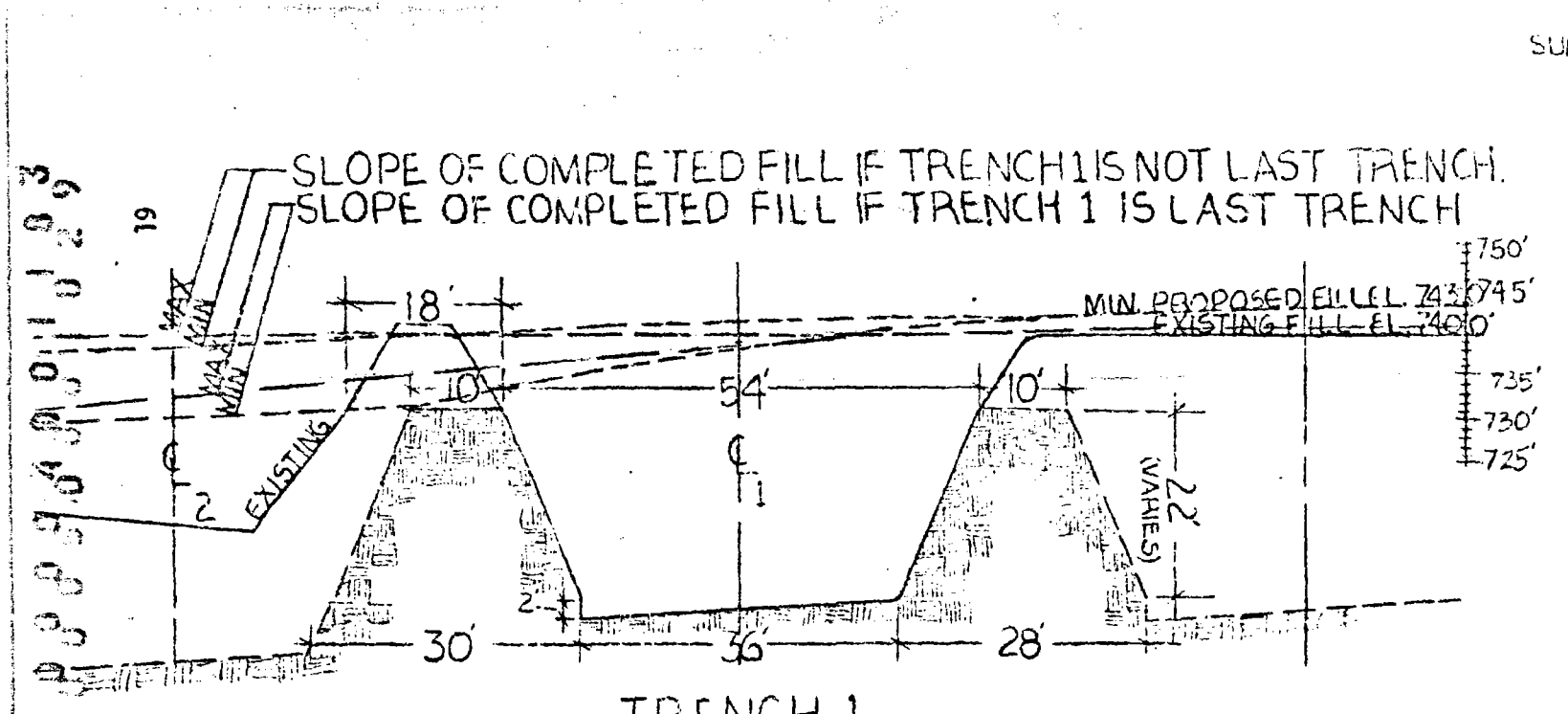


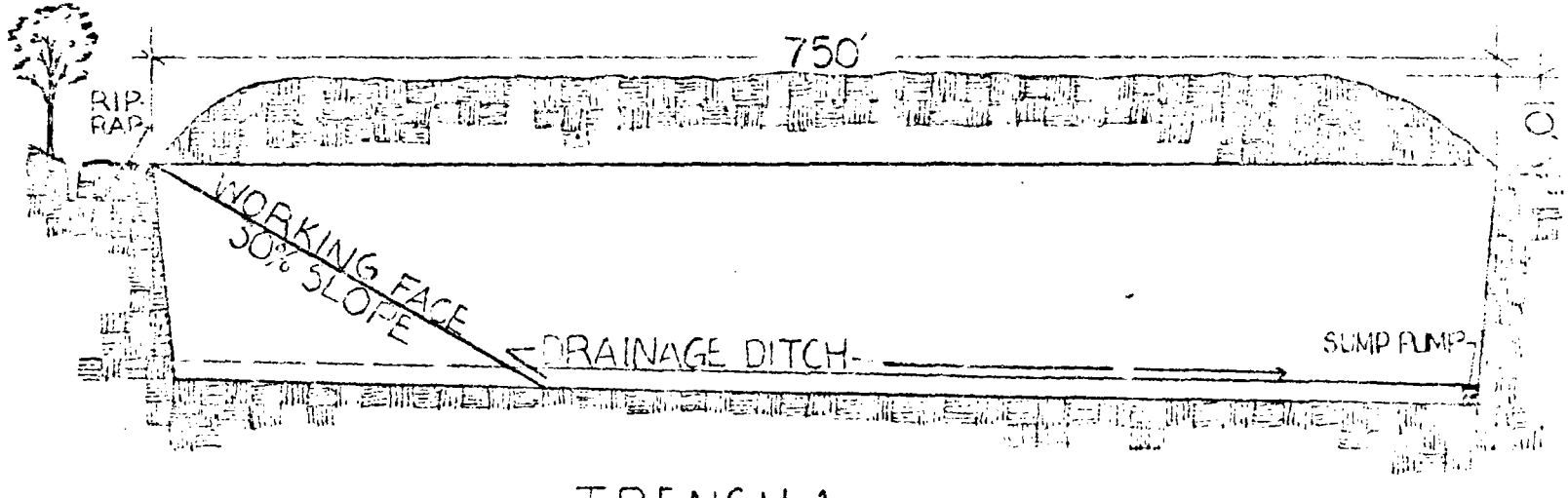
SECTION C-C'

1"=20'0" VERTICAL
1"=100'0" HORIZONTAL

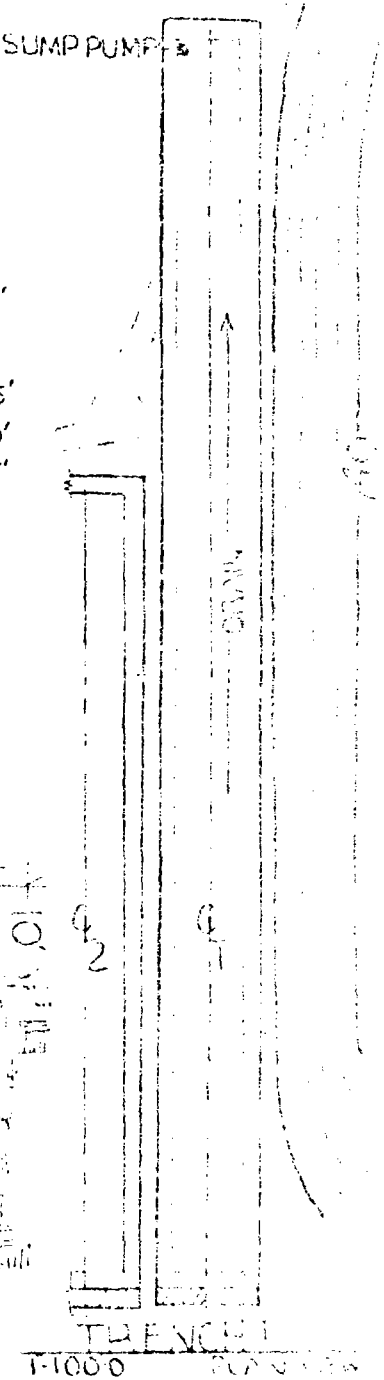
CROSS SECTION



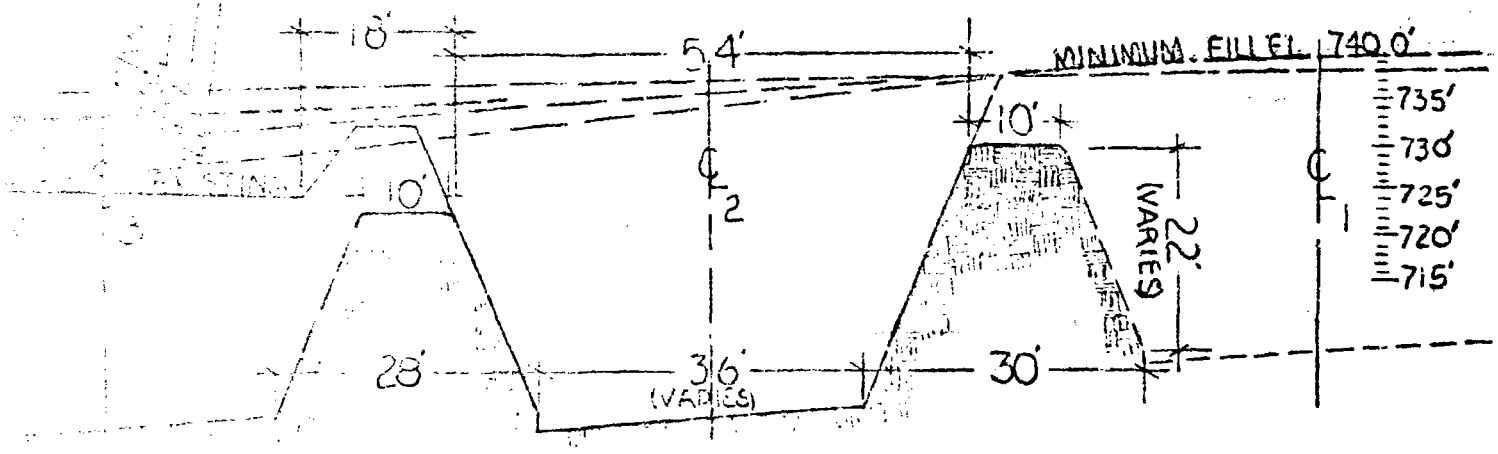
TRENCH 1
1"=20'0" CROSS SECTION



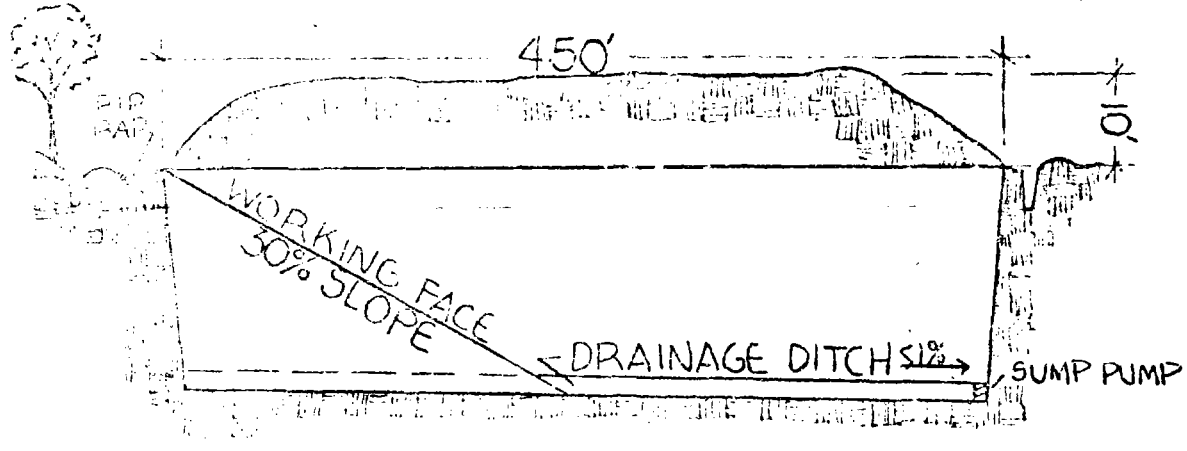
TRENCH 1
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDAINAL CROSS SECTION



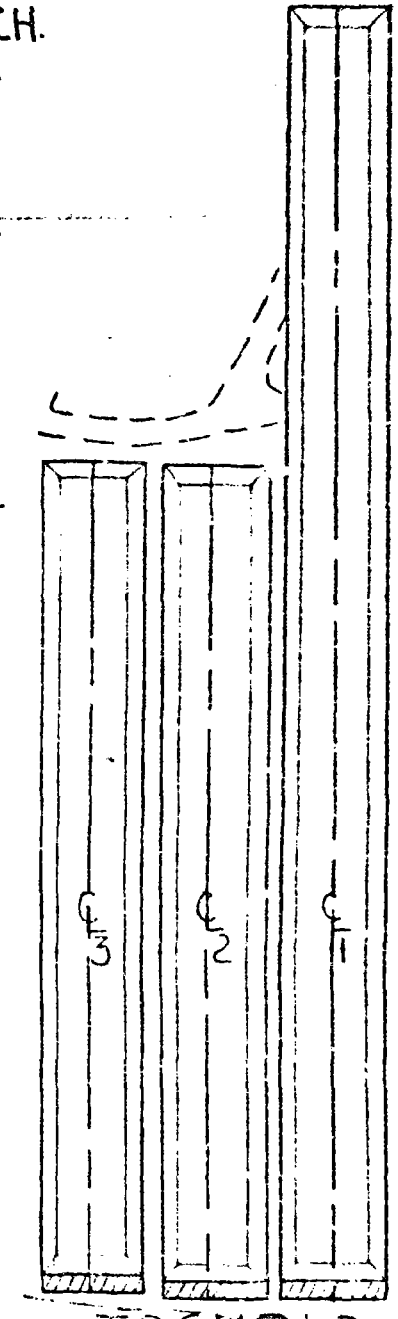
SLOPE OF COMPLETED FILL IF TRENCH 2 IS NOT LAST TRENCH.
SLOPE OF COMPLETED FILL IF TRENCH 2 IS LAST TRENCH.



TRENCH 2
1"=20'-0" CROSS SECTION

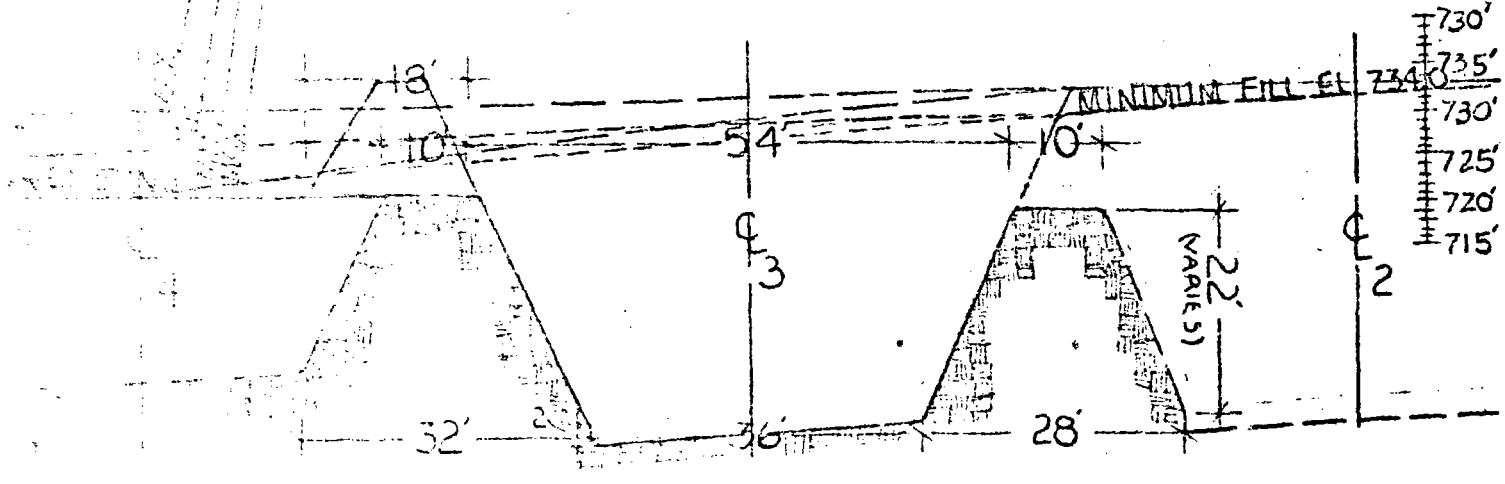


TRENCH 2
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDANAL CROSS SECTION

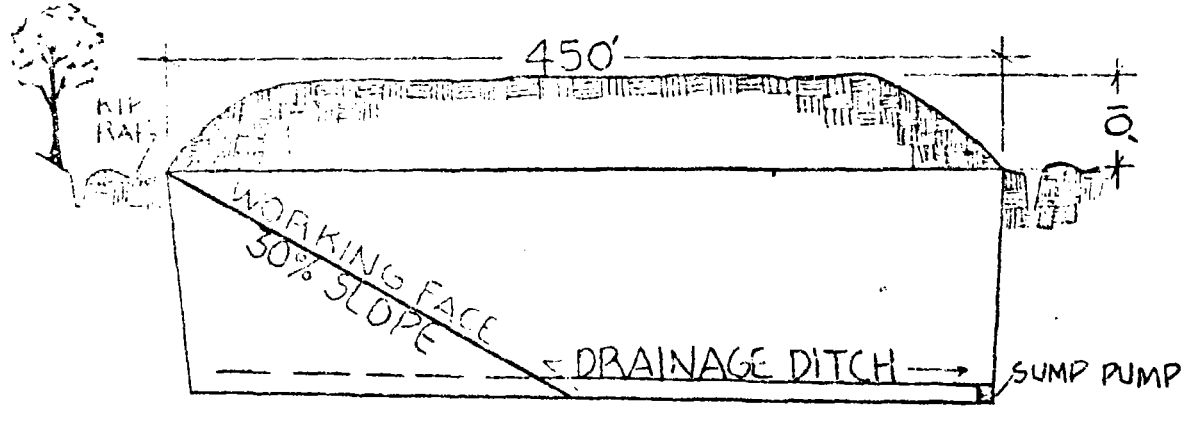


TRENCH 2
1"=100'-0" PLAN VIEW

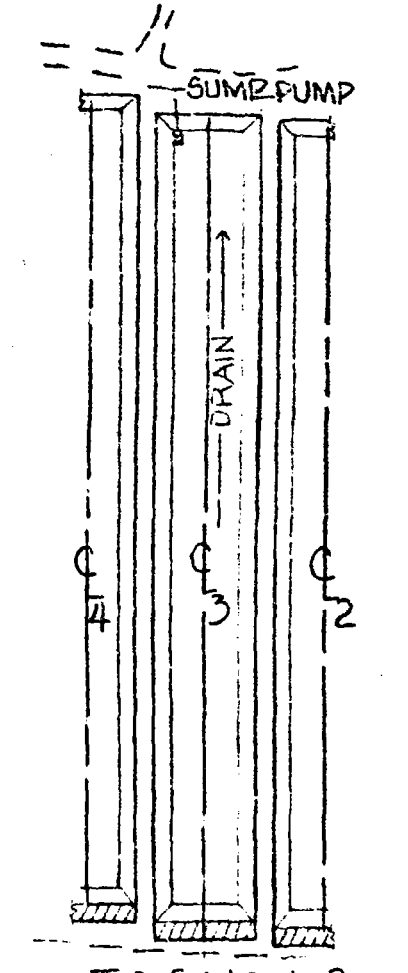
SLOPE OF COMPLETED FILL IF TRENCH 3 IS NOT LAST TRENCH.
SLOPE OF COMPLETED FILL IF TRENCH 3 IS LAST TRENCH.



TRENCH 3
1" = 20'-0" CROSS SECTION



TRENCH 3
HORIZONTAL - 1" = 100'-0"
VERTICAL - 1" = 20'-0" LONGITUDINAL CROSS SECTION



TRENCH 3
1" = 100'-0" PLAN VIEW

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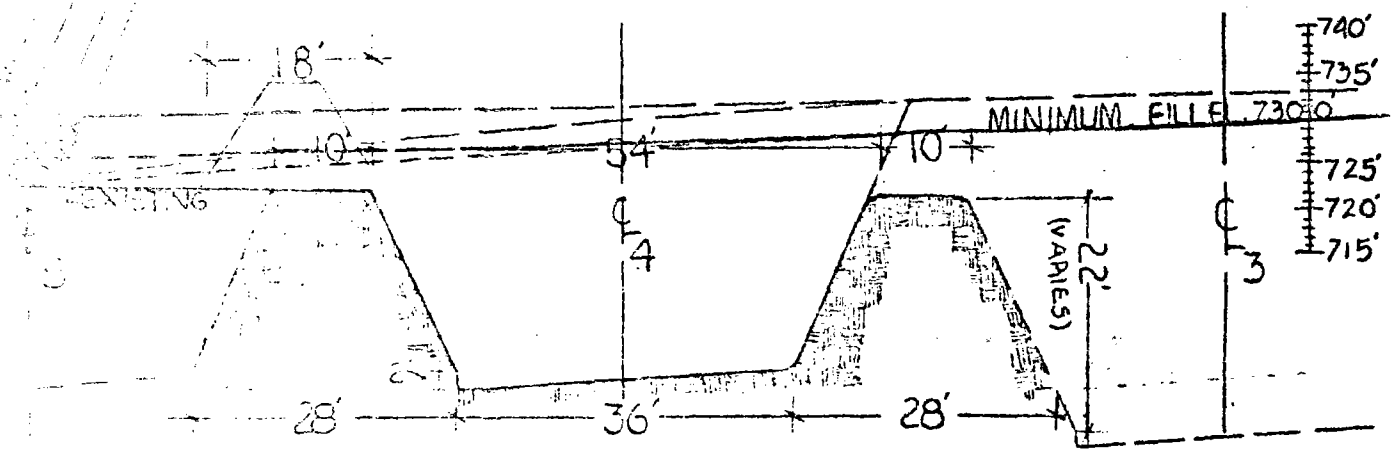
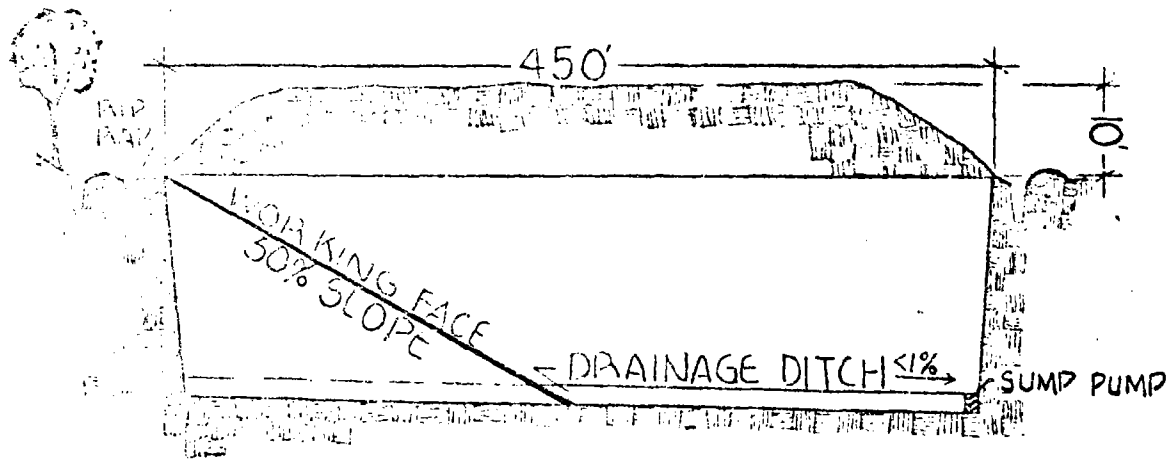
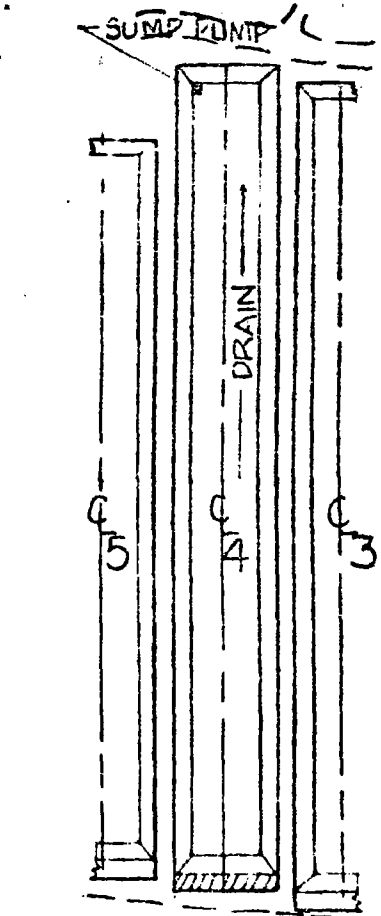
SLOPE OF COMPLETED FILL IF TRENCH 4 IS NOT LAST TRENCH.
SLOPE OF COMPLETED FILL IF TRENCH 4 IS LAST TRENCH.



TRENCH 4
1"=20'-0" CROSS SECTION

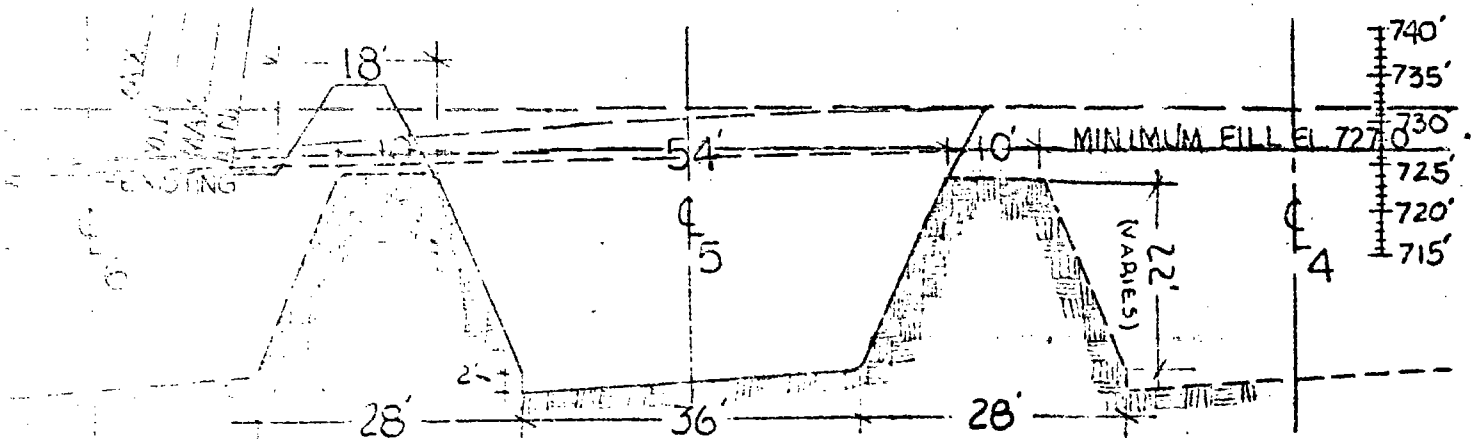


TRENCH 4
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDINAL CROSS SECTION

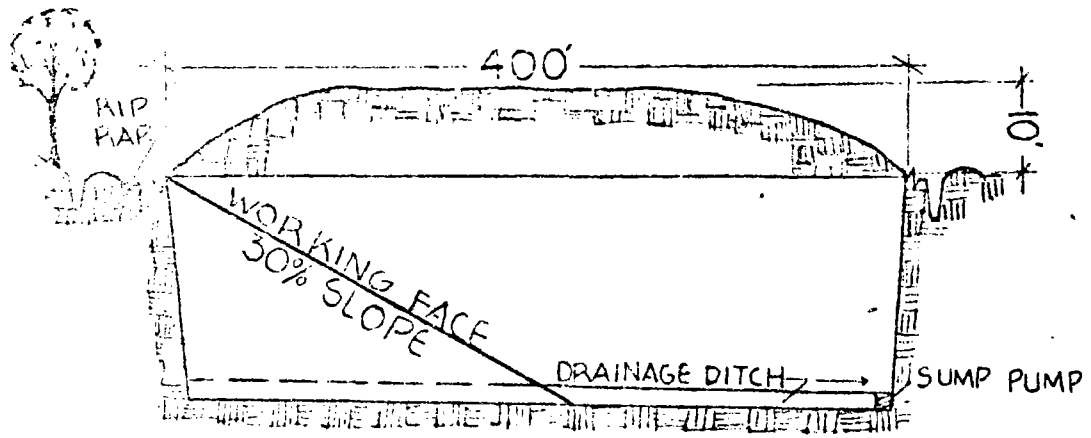


TRENCH 4
1"=100'-0" PLAN VIEW

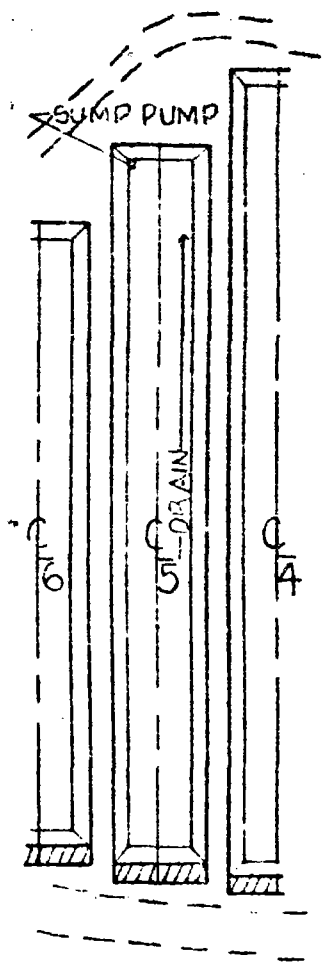
SLOPE OF COMPLETED FILL IF TRENCH 5 IS NOT LAST TRENCH.
SLOPE OF COMPLETED FILL IF TRENCH 5 IS LAST TRENCH.



TRENCH 5
1"=20'-0" CROSS SECTION



TRENCH 5
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDANAL CROSS SECTION



TRENCH 5
1"=100'-0" PLAN VIEW

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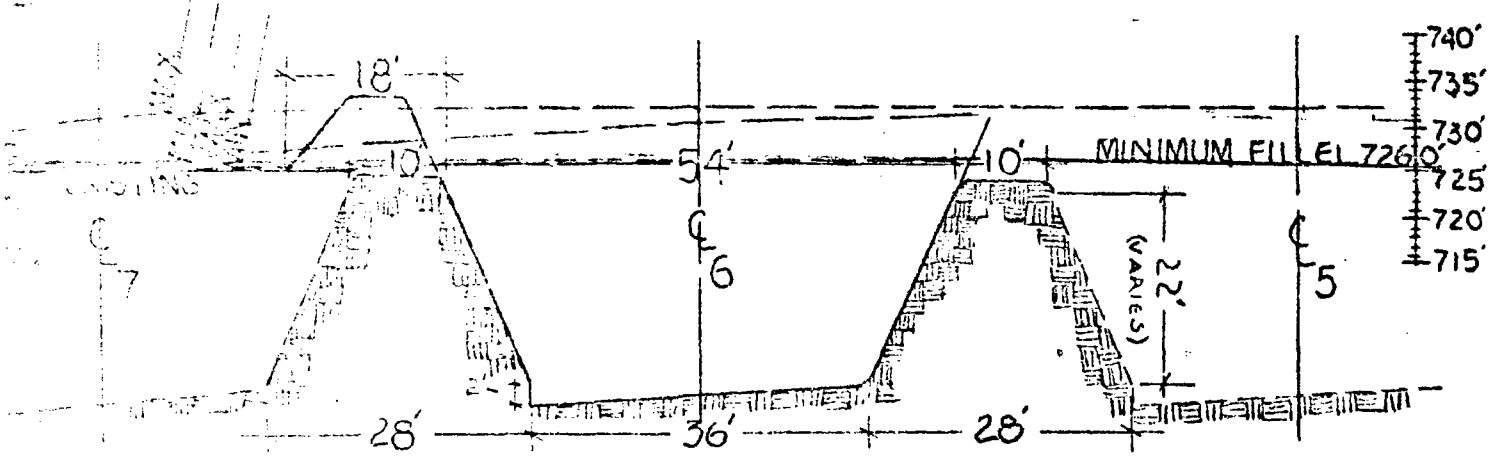
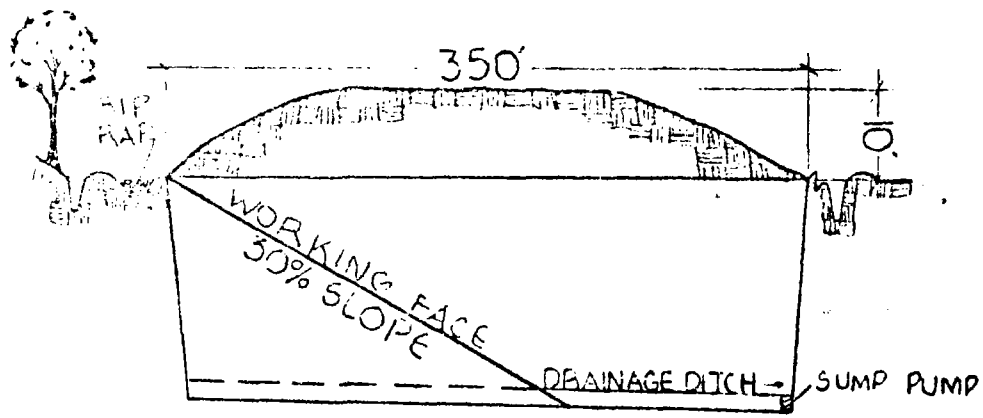
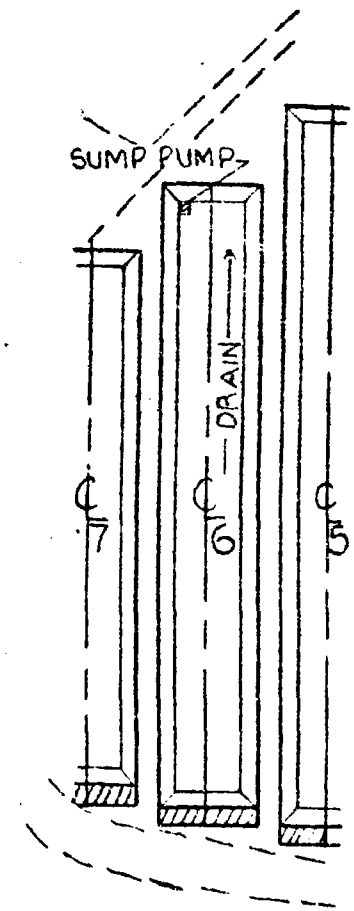
SLOPE OF COMPLETED FILL IF TRENCH 6 IS NOT LAST TRENCH.
SLOPE OF COMPLETED FILL IF TRENCH 6 IS LAST TRENCH.



TRENCH 6
1"=20'-0" CROSS SECTION



TRENCH 6
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDANAL CROSS SECTION



TRENCH 6
1"=100'-0" PLAN VIEW

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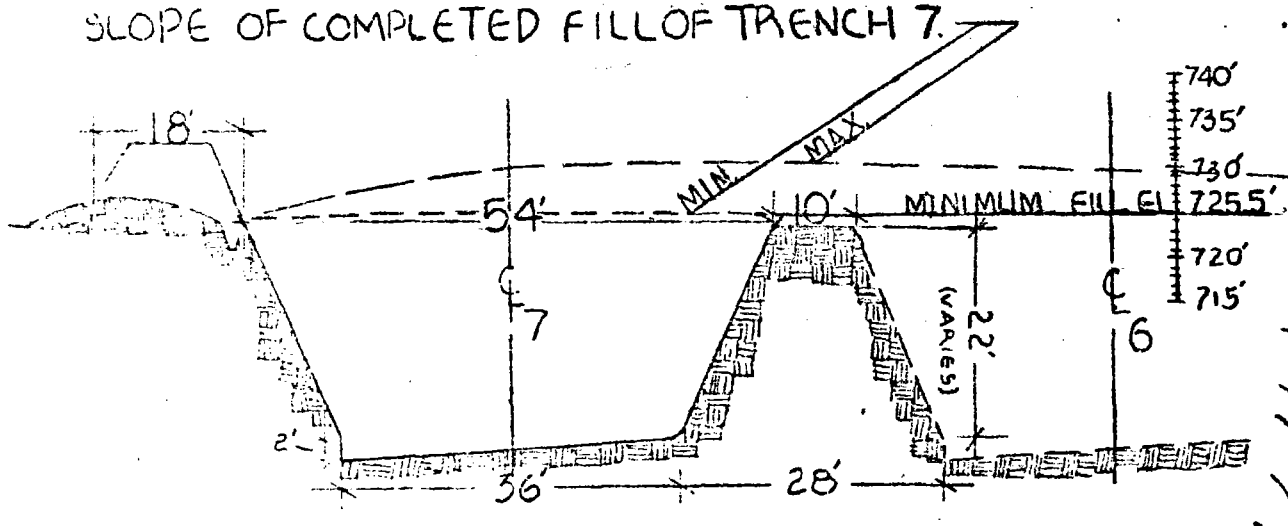
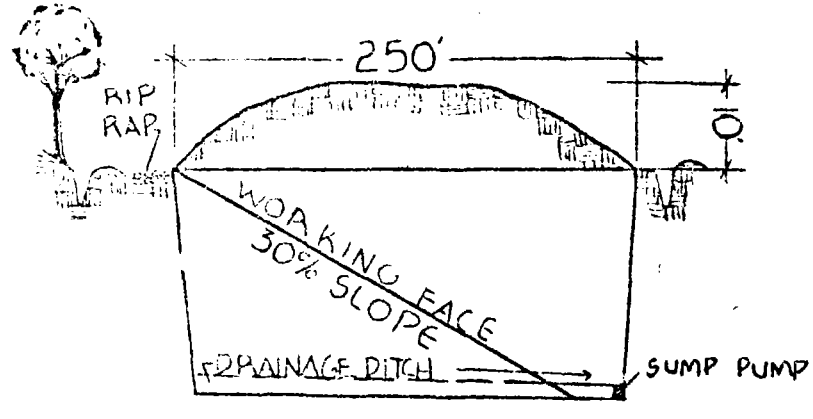
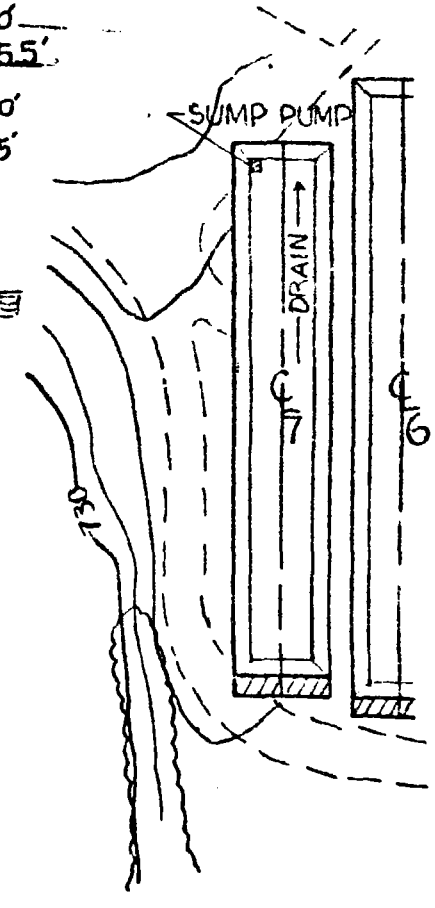
SLOPE OF COMPLETED FILL OF TRENCH 7.



TRENCH 7
1"=20'-0" CROSS SECTION



TRENCH 7
HORIZONTAL - 1"=100'-0"
VERTICAL - 1"=20'-0"
LONGITUDANAL CROSS SECTION



TRENCH 7
1"=100'-0" PLAN VIEW

7/31/74

APPENDIX

Contents:

Notification Certificate

Notification Letter

Certificate of Publication

Park District - Statement of Intent

Land.J.'ll

I hereby certify that the attached notifications are true and correct copies of notices furnished by the undersigned to the persons named in the notification, and that the persons so notified include all persons required to be notified under Public Act 77-1948.

B.S.Kindra
Balbir S. Kindra
City Engineer

8-12-74
Date